

REMARKS

Applicant affirms the election of claims 1-20.

Claims 1, 5-8, and 11 are amended. Claims 2-4, 9, 10, and 12-25 are canceled without prejudice to the subsequent filing of a continuation application. Claims 1, 5-8, and 11 are pending in this application. Claim 1 is an independent claim. Claim 8 is an independent claim. Claims 5-7 depend from independent claim 1. Claim 11 depends from independent claim 8. All claim rejections of the canceled claims are now moot.

Section 102 - Patterson

Claims 1 and 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Patterson (U.S. Patent 2,835,465). Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. V. Union Oil Co. of California, 2 USPQ2d

1051, 1053, (Fed. Cir. 1987). Also, "All words in a claim must be considered in judging patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 165 USPQ 494. 496 (CCPA 1970).

On page 4 of the Office Action, the Examiner admits that Patterson fails to teach coils forming a frusto-conically tapered helix and the posterior coil having a larger diameter than the anterior coil. Claims 1 and 8 specify coils forming a frusto-conically tapered helix and the first coil having a larger diameter than the second coil. Accordingly, Patterson is not a section 102 reference against Applicant's claims 1, 5-7, 8, and 11, and all section 102 rejections are now believed to be overcome by way of amendment.

Section 103

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v Aeroquip Corp.*, 713 F.2d

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1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v Nortron*

Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983).

Further, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W. L. Gore &*

Associates, Inc. v Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

“All words in a claim must be considered in judging patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 165 USPQ 494. 496 (CCPA 1970).

Referring to the language of claim 8, a supporting substrate having opposing first and second sides and an opening therethrough extending from the first side to the second side is specified. Further specified is a helix extending through the opening and including at least a first coil and a second coil. The first and second coils are fabricated of a strand of resilient material, and have incrementally graduated diameters forming a frusto-conically tapered shape of the helix having a hollow core, in which the first coil has a larger diameter than the second coil. Engagement means depending from the first coil for receiving and supporting a selected object is also specified. The first coil is received against the first

side of the substrate and the second coil received against the second side of the substrate. Claim 8 goes on to specify that the first and second coils of the helix are mutually biased compressively retaining the substrate therebetween the first and second coils.

From the language of claim 8 it can be seen that several specific elements are included in the claimed hanger assembly. First, a supporting substrate has opposing first and second sides. Second, an opening extends through the substrate from the first side to the second side. Third, a helix extends through the opening. Fourth, the helix includes at least a first coil and a second coil. Fifth, the first and second coils are fabricated of a strand of resilient material. Sixth, the first and second coils have incrementally graduated diameters forming a frusto-conically tapered shape of the helix having a hollow core. Seventh, the first coil has a larger diameter than the second coil. Eight, engagement means depends from the first coil for receiving and supporting a selected object is also specified. Ninth, the first coil is received against the first side of the substrate and the second coil is received against the second side of the substrate. Ten, the first and second

coils of the helix are mutually biased compressively retaining the substrate therebetween the first and second coils. Each of these ten elements specifically describes a feature or structure of the invention.

The ten basic elements of claim 8 are specific components of the claimed invention and specifically describe how the helix, the anterior and posterior coils thereof, the first and second sides of the substrate, the opening through the substrate, and the engagement means are arranged. As can be seen from the plain language of the claim, these ten elements are not simply characteristics that occur naturally or inherently. Claim 1 claims the hanger apparatus and is identical to claim 8 but for the provision of the substrate. In other words, claim 8 includes the provision of the hanger apparatus and the substrate as a combination, and claim 1 sets forth the hanger apparatus apart from the substrate.

Beginning on page 4 of the Office Action, the Examiner states that Patterson teaches coils but fails to teach the coils forming a frusto-conically tapered helix and a first or posterior coil having a larger diameter than the second or anterior coil. The Examiner cites Murrell for teaching

a frusto-conically tapered helix with the first or posterior coil having a larger diameter than the second or anterior coil. The Examiner concludes that it would have been obvious to modify Patterson's coil with frusto-conically tapered helix as taught by Murrell. Applicant disagrees.

In Patterson, spring portion 21 is made in the form of a helical spring having an outside diameter slightly larger than the diameter of cylindrical bore 10 into which it is to be inserted. Spring portion 21 is pushed into cylindrical bore 10 and concurrently rotated, in which the outer diameter of the coil is decreased and it may be readily inserted into cylindrical bore 10. Rotation of spring portion 21 in the opposite direction is impossible because the coil tends to unwind, the outer diameter tends to increase, and it thereby more firmly grips the wall of the cylindrical bore 10.

Patterson teaches that spring portion 21 has one diameter, namely, an outside diameter that is slightly larger than the diameter of cylindrical bore 10 into which it is to be inserted, which allows the spring portion 21 to be secured to cylindrical bore 10 in response to pushing it

into cylindrical bore 10 and rotating it in a first direction, and which prevents it from becoming detached from cylindrical bore 10 by rotating it in the opposite direction. Patterson does not teach of providing spring portion 21 as a tapered helix so as to define coils having incrementally graduated diameters. If Patterson's spring portion 21 was in the form of a tapered helix, Patterson's mounting bracket may not work for its intended purpose, and, moreover, may allow it to be easily removable from the cylindrical bore in response to rotation of it in a direction that is the opposite of the direction of rotation used to install it. In fact, it may not be possible to secure Patterson's spring portion 21 to cylindrical bore 10 in the manner ascribed by Patterson if it was fashioned as a tapered helix. Thus, the Examiner's proposed modification could render Patterson's mounting bracket inoperative or unsafe. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Furthermore, the combination claimed by Applicant in claim 8 specifies the first coil is received against the

first side of the substrate and the second coil is received against the second side of the substrate, in which the first and second coils of the helix are mutually biased compressively retaining the substrate therebetween the first and second coils. Patterson does not show this. In Patterson, spring portion 21 is received in cylindrical bore 10. In Patterson, a first coil of spring portion 21 is not received against a first side of a substrate, a second coil of spring portion 21 is not received against an opposing second side of the substrate, and first and second coils of spring portion 21 do not compressively retain the substrate therebetween. Accordingly, any modification of Patterson in view of Murrell would still not result in Applicant's claimed invention as set forth in claim 8. Moreover, wire coil 6 in Murrell is received through a hole through a substrate and threadably receives a screw, in which the coils of wire coil 6 adapt themselves as a nut. There is no teaching or suggestion in Murrell of providing one of its coils with engagement means for retaining a selected object. Accordingly, there is no motivation in the art to modify the teachings of Murrell to provide one of its coils with engagement means as taught by Patterson, because to do so would render the securing device in Murrell inoperative for its intended purpose because the

teaching in Murrell is the combination of a screw threadably secured to a thin wall with a wire coil formed in the shape of a tapered helix. Furthermore, to provide one of the coils of the wire coil 6 of Murrell with engagement means as taught by Patterson would provide it with structure that could render the invention in Murrell suitable for a different purpose that Murrell does not contemplate. Therefore, according to *In re Gordon*, there is no suggestion or motivation to make such a modification.

In sum, Patterson does not teach of providing spring portion 21 as a tapered helix so as to define coils having incrementally graduated diameters. If Patterson's spring portion 21 was in the form of a tapered helix it may not work for its intended purpose and could make Patterson's mounting bracket inoperative or unsafe which, under *In re Gordon*, refutes such a modification to Patterson. Patterson does not show coils compressively retaining therebetween a substrate and any modification of Patterson in view of Murrell would still not result in Applicant's claimed invention as set forth in claim 8. Moreover, there is no teaching or suggestion in Murrell of providing one of its coils with engagement means for retaining a selected object because to do so would render the securing device in

Murrell inoperative for its intended purpose and, moreover, provide it with structure that could possibly render the invention in Murrell useful for a different purpose that Murrell does not contemplate.

In view of the foregoing, claims 1, 5-7, 8, and 11 are believed to be in condition for allowance. Further, claims 5-7 are dependent upon a claim that is allowable according the argument set forth above and, therefore, each of them is allowable. Claim 11 is dependent upon a claim that is allowable according to the argument set forth above and, therefore, it is allowable. Furthermore, the cited and non-applied subsidiary references have been noted and reviewed, but are submitted to be less relevant than the relied-upon references.

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Examiner's thorough and thoughtful consideration of
this application is sincerely appreciated.

Respectfully submitted,



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